Great Basin Coordination Centers

Fuels and Fire Behavior Advisory

Subject: **Heavy Fine Flashy Fuel Loadings and Potential for Extreme Fire Behavior**

Discussion: Poor snowfall across the grasslands of western Utah, southern Idaho and much of eastern and central Nevada allowed the prolific grass crop from 2005 to carryover to this year's fuel load. Grasses that usually get compacted by winter snows remained standing tall this year. New growth added to the high loadings and created a more continuous fuel bed at lower elevations. A wet and warm spring also made fine fuels more continuous into mid elevations under the pinyon-juniper stands where grasses typically do not occur.

Fuel loadings have been measured at 1.5 to 2 tons dry weight per acre in southwest and south central Idaho, northern Utah and northern Nevada increasing to up to 8 tons per acre in the southwest deserts of Utah. Coupled with spread into drought stressed, insect damaged and diseased vegetation, these fuel loadings increase the fire danger and the potential for extreme fire behavior. In addition, live fuel moistures in Utah are much lower than normal for early July (80-100% in pinyon-juniper and chaparral) and will also contribute to the increase in extreme fire behavior. **Major impacts of these factors include increased intensity and severity and rapid rates of spread.**

Concerns to Firefighters and the Public:

- Anticipate flashy fine fuels to ignite easily and spread rapidly. **You cannot out run it!**
- Anticipate fire to creep under wetlines and retardant lines in areas where fine fuel matting is observed.
- Anticipate large acres to be consumed in a short period of time, even in low wind conditions. **Firefighters in Nevada and Utah have reported extreme fire behavior typical of late August.**
- Cured fine flashy fuels will burnoff and will dry still green grasses and live shrubs fuels. **Watch out for re-burn situations!**
- Prolific cheatgrass growth is allowing fire to spread into old burn areas. **Old burns may not be adequate fire breaks!**
- Outflow winds from thunderstorms may cancel the moderating effects of higher relative humidity on fine fuels.
- Anticipate fires to exhibit extreme spread rates, elongated flaming fronts, and increasing fire brands; **expect more long range spotting.**
- Short periods of precipitation and higher relative humidity will moderate fire behavior but hot and dry weather will quickly dry fine fuels and return extreme fire behavior conditions. **Establish trigger points and constantly re-evaluate tactics to ensure safety.**

Mitigation Measures:

- Indirect tactics will have to be used.
- Ensure firefighters have good anchor points - keeping one foot in the black.
- Have adequate numbers of Field Observers who understand the effects of weather changes, topography and can see the flaming front.

Area of Concern: Areas of concern include the Snake River Plain west of a line from Arco to Pocatello to Malad City; in Utah west of Interstate 15 from the Idaho border to Salt Lake City to Fillmore to Cedar City to St. George. In Nevada areas of concern include the rangelands along the Interstate 80 corridor and Lincoln and Clark counties in southeastern Nevada.